

a base attached to the interior distal end of the socket, having a proximate surface, including at least one channel extending through said proximate surface;

a duct extending through said socket, connected to said channel; and

a valve coupled to said duct for controlling the flow of air therethrough.

45. (New) The prosthetic limb and valve assembly of Claim 44, wherein said valve is coupled to a pump which provides a forced transfer of air to or from the socket interior.

46. (New) The prosthetic limb and valve assembly of Claim 44, wherein said base includes an attachment means adapted to releasably attach an upright assembly to the distal end of the socket.

47. (New) The prosthetic limb and valve assembly of Claim 44, wherein said base is adapted to be removably fitted within the socket interior at the distal end of the socket.

48. (New) The prosthetic limb and valve assembly of Claim 44, wherein said base includes a proximate cushion portion.

49. (New) The prosthetic limb and valve assembly of Claim 44, wherein said sleeve provides a seal between said residual limb and said socket.

50. (New) A prosthetic limb comprising:

a sleeve to be worn over the residual limb;

a socket having an interior configured to contain a wearer's residual limb and said sleeve, a distal end, and an inner surface; and

a valve assembly removably coupled to the distal end of the socket, providing fluid communication with the socket interior.

51. (New) The prosthetic limb of Claim 50, wherein said valve is coupled to a pump which provides a forced transfer of air to or from the socket interior.

52. (New) The prosthetic limb of Claim 50, further comprising a base attached to the interior distal end of the socket, having a proximate surface, including at least one channel extending through said proximate surface.

53. (New) The prosthetic limb of Claim 52, wherein said base is adapted to be removably fitted within the socket interior at the distal end of the socket.

54. (New) The prosthetic limb of Claim 52, wherein said base includes an attachment means adapted to releasably attach an upright assembly to the distal end of the socket.

55. (New) The prosthetic limb of Claim 52, wherein said base includes a proximate cushion portion.

C 56. (New) The prosthetic limb of Claim 50, wherein said sleeve provides a seal between said residual limb and said socket.

57. (New) A prosthetic limb socket system configured to receive a residual limb, said prosthetic limb socket system comprising:

- a sleeve to be worn over the residual limb;

- a prosthetic limb socket comprising:

 - a proximal opening;

 - a socket wall and a distal end configured to define a socket interior;

 - a channel configured to conduct fluid between said socket interior and an exterior of said prosthetic limb socket; and

 - a check valve releasably coupled to said channel and configured to spontaneously open said channel in response to a socket interior pressure higher than an exterior pressure and close said channel in response to said socket interior pressure substantially equal to or less than said exterior pressure.

58. (New) The prosthetic limb socket system of Claim 57, wherein said valve is coupled to a pump which provides a forced transfer of air to or from the socket interior.

59. (New) The prosthetic limb socket system of Claim 57, further comprising a base attached to the interior distal end of the socket, having a proximate surface, including at least one channel extending through said proximate surface.

60. (New) The prosthetic limb socket system of Claim 59, wherein said base is adapted to be removably fitted within the socket interior at the distal end of the socket.

C1 61. (New) The prosthetic limb socket system of Claim 59, wherein said base includes an attachment means adapted to releasably attach an upright assembly to the distal end of the socket.

62. (New) The prosthetic limb socket system of Claim 59, wherein said base includes a proximate cushion portion.

63. (New) The prosthetic limb socket system of Claim 59, wherein said sleeve provides a seal between said residual limb and said socket.

64. (New) A valve assembly for a prosthetic limb socket, comprising:
a base adapted to be removably fitted within the socket interior at the distal end of the socket, said base having a proximate surface, including at least one channel extending through said proximate surface;

a duct extending through said socket, connected to said channel; and

a valve coupled to said duct for controlling the flow of air therethrough.

65. (New) A method for attaching a prosthesis including a suction socket having an open proximal end for receiving a residual limb and a distal end, comprising:

(a) rolling a sleeve over the residual limb;

(b) installing a valve means into said distal end of said suction socket, said valve connected to a duct extending through said socket;

(c) positioning said residual limb with said sleeve into said open proximal end of said suction socket; and

(d) drawing air through said duct means of a vacuum pump to create a negative pressure between said sleeve and said distal end of said suction socket such that said sleeve is pulled into full engagement within said suction socket.

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66. (New) A method for donning or doffing a suction suspension prosthesis, said prosthesis including a sleeve to be worn over the residual limb, a suction socket having an open proximal end for receiving said residual limb and said sleeve and a distal end, comprising influencing air pressure between said sleeve and said distal end of said socket, decreasing the air pressure to a negative pressure to draw said liner and residual limb into said suction socket or increasing the air pressure to a positive pressure to expel said liner and said residual limb from said suction socket.

REMARKS

Claims 20-36 and 43-66 are presently active in this case. Claims 20-36 having been reintroduced, claims 37-42 having been canceled, and claims 43-66 having been added by way of the present amendment.

Regarding claims 20-36, those claims were rejected in the May 12, 1998 office action. Claims 20-36 were rejected under the judicially created doctrine of double patenting over claims 1-17 of US patent No. 5,702,489; Claims 1 [sic; 20], 26, and 32 were rejected under 35 USC 102(b) as being anticipated by US patent No. 5,139,523 to Paton; Claims 32 and 33 were rejected under 35 USC 102(b) as being anticipated by US patent No. 980,457 to Toles;